

CLAIMS

1. A birth monitoring system, comprising:
5 a monitor including at least one sensor operative to measure a physiological parameter associated with labor;
a posture sensor which generates a signal indicative of posture of a mother; and
circuitry which generates an output signal dependent on both a measurement of said sensor and a posture measurement of said posture sensor.
- 10 2. A system according to claim 1, wherein said output signal comprises a signal selectively suppressed responsive to said measured posture.
3. A system according to claim 1, wherein said circuitry is operative to modify said output
15 signal responsive to said posture signal.
4. A system according to claim 1, wherein said circuitry is operative to generate a signal indicative of a change in said physiological parameter responsive to a change in said posture.
- 20 5. A system according to claim 1, wherein said physiological parameter comprises a geometry of a cervix.
6. A system according to claim 1, wherein said physiological parameter comprises a fetal head position relative to a birth canal of a mother.
- 25 7. A system according to claim 1, wherein said physiological parameter comprises a fetal physiological parameter.
8. A system according to claim 7, wherein said fetal physiological parameter comprises a
30 fetal heart rate.

9. A system according to claim 1, wherein said physiological parameter comprises a maternal physiological parameter.

10. A system according to claim 1, wherein said physiological parameter is changed by a
5 change in posture.

11. A system according to claim 1, wherein a measurement by said sensor is changed by a change in posture.

10 12. A system according to claim 11, wherein said sensor comprises at least one internal probe and at least one external probe serving as a reference thereto.

13. A system according to claim 1, wherein said output signal is generated if a posture change is not maintained.

15 14. A system according to claim 1, comprising memory which stores a correspondence between posture and a physiological parameter.

15. A system according to claim 1, wherein said circuitry extracts at least one maternal
20 physiological parameter from said posture sensor.

16. A system according to claim 15, wherein said maternal parameter comprises breathing.

17. A system according to claim 1, wherein said posture sensor comprises an acceleration
25 sensor.

18. A system according to claim 1, wherein said posture sensor is calibrated to be aligned to one or more maternal body axes.

30 19. A system according to claim 1, wherein said output signal comprises a recommendation to a caregiver regarding posture.

20. A system according to claim 1, wherein said posture sensor is housed together with at least a part of said at least one sensor.

21. A method of generating an output signal indicative of a medical monitoring of a patient in labor, comprising:

measuring at least one postural parameter of the patient;
measuring at least one physiological parameter associated with labor; and
generating a signal responsive to both of said measurements.

22. A method according to claim 21, comprising discarding a physiological measurement responsive to a posture measurement.

23. A method according to claim 21, wherein said generating comprises correcting a physiological measurement based on said posture measurement.

24. A method according to claim 21, wherein said generating comprises tracking a change in at least one physiological parameter responsive to said posture measurement.

25. A method according to claim 21, wherein said generating comprises generating a physiological measurement from said posture measurement.

26. A method according to claim 21, comprising monitoring an effect of posture change on said physiological parameter.

27. A method according to claim 21, comprising monitoring a compliance of a patient with a posture change.

28. A method according to claim 21, comprising determining a side on which the patient is lying.

29. A method according to claim 21, wherein said postural parameter and said physiological parameter are both acquired using a same sensor.

30. A method according to claim 29, comprising determining a change in posture based on a measured change in said at least one physiological parameter.

31. A method according to claim 23, wherein correcting comprises applying a correction
5 value to said physiological parameter.

32. A method according to claim 31, comprising updating said correction value when a posture change is detected.

10 33. A method according to claim 32, wherein updating comprises updating assuming that said physiological parameter does not change over a period of time of the occurrence of said posture change.

34. A mounting assembly, comprising:

15 an elastic adhesive ring adapted to adhere to a human skin;
a selectively locking mount attached to said ring; and
a housing adapted to receive a sensor and selectively lockable to said mount, and configured to provide mechanical contact of at least one part thereof to a skin to which the ring adheres.

20 35. An assembly according to claim 34, wherein said locking is a snap mounting.

36. An assembly according to claim 34, wherein said mount interlocks with at least one aperture in said ring.

25 37. An assembly according to claim 34, wherein said sensor comprises an ultrasonic transducer adapted to ultrasonically communicate through a center of said ring and wherein said mechanical contact is suitable for ultrasonic transmission therethrough.

30 38. An assembly according to claim 34, wherein said sensor comprises an inclination sensor.

39. An assembly according to claim 34, comprising circuitry for RF communication.

40. An assembly according to claim 34, comprising a power source in said housing.

41. An assembly according to claim 34, comprising circuitry for digitizing and processing
5 of ultrasound signals.

42. A method of applying ultrasound coupling material to an active element designed for gel-coupled contact with skin, comprising:

10 mounting the element in an adhesive mount;
applying a coupling material suitable for ultrasonic coupling to the element; and
stripping a covering from said mount, thereby exposing an adhesive layer of said mount
and removing excess gel-like material.